Customer No. 28289

Application No. Not Yet Assigned

Paper Dated: December 17, 2004

In Reply to USPTO Correspondence of N/A

Attorney Docket No. 0149-045841

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in

the application:

**Listing of Claims** 

Claims 1-15 (Cancelled).

16. (New) An inner magnetic shield material for use in manufacturing an

inner magnetic shield to be installed inside a color picture tube, comprising a steel strip

having a coating film of an organic resin which consists essentially of C and H, or of C, H,

and O, or of C, H, O, and N on at least one surface of the steel strip,

wherein the at least one surface of the steel strip has a surface roughness (Ra)

of 0.2-3 μm, the organic resin coating film has a thickness (T) of 0.1-6 μm, and the ratio T/Ra

is in the range of 0.2-4.0.

17. (New) An inner magnetic shield material for use in manufacturing an

inner magnetic shield to be installed inside a color picture tube, comprising a steel strip

having a coating film of an organic resin which consists essentially of C and H, or of C, H,

and O, or of C, H, O, and N on at least one surface of the steel strip,

wherein the at least one surface of the steel strip has a surface roughness (Ra)

of 0.2-3 μm, the organic resin coating film has a thickness (T) of 0.1-6 μm, and this coating

film contains particles of a wax dispersed therein, wherein the ratio  $(\phi/T)$  of average particle

diameter ( $\phi$ ) of the wax to film thickness (T) is in the range of 0.5-5, and the content of the

wax in the film is such that 2-20% of the surface of the coating film is occupied by the wax

when the surface is observed under an electron microscope.

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- 18. (New) The inner magnetic shield material as claimed in claim 17, wherein the ratio T/Ra is in the range of 0.2-4.0.
- 19. (New) The inner magnetic shield material as claimed in claim 16, wherein the organic resin coating film contains one of (a) at least one coupling agent in a total amount of 2-50 wt% and (b) at least one metal oxide selected from SiO<sub>2</sub>, Fe<sub>3</sub>O<sub>4</sub>, Fe<sub>2</sub>O<sub>3</sub>, Ni-O, Zr-O, Cr<sub>2</sub>O<sub>3</sub>, and Al<sub>2</sub>O<sub>3</sub> in a total amount of 2-80 wt%, or both (a) and (b).
- 20. (New) The inner magnetic shield material as claimed in claim 16, wherein the organic resin is combustible for decomposition by heating in air at a temperature of 450°C or below.
- 21. (New) The inner magnetic shield material as claimed in claim 16, wherein the Si and Al contents ({Si} and {Al}, respectively, in wt%) of the steel strip satisfy the following inequalities:

$$[Si] \ge 0.02, 0.25 \le [Si] + [Al] \le 0.55, 0.05 \le [Al] - [Si] \le 0.35.$$

- 22. (New) The inner magnetic shield material as claimed in claim 16, wherein the steel strip has a plated film with a coating weight of 0.1-20 g/m<sup>2</sup> as a primary coat under the organic resin coating film, the plated film being formed of a metal selected from Ni, Cr, and Fe or an alloy based on the metal.
- 23. A method of manufacturing an inner magnetic shield material comprising forming a coating film of an organic resin consisting essentially of C and H, or of C, H, and O, or of C, H, O, and N on at least one surface of a cold rolled steel strip or pickled hot rolled steel strip,

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wherein the at least one surface of the steel strip has a surface roughness (Ra) of 0.2-3  $\mu$ m, the organic resin coating film has a thickness (T) of 0.1-6  $\mu$ m, and the ratio T/Ra is in the range of 0.2-4.0.

24. (New) A method of manufacturing an inner magnetic shield material comprising forming a coating film of an organic resin consisting essentially of C and H, or of C, H, and O, or of C, H, O, and N on at least one surface of a cold rolled steel strip or pickled hot rolled steel strip,

wherein the at least one surface of the steel strip has a surface roughness (Ra) of 0.2-3  $\mu$ m, the organic resin coating film has a thickness (T) of 0.1-6  $\mu$ m, and this coating film contains particles of a wax dispersed therein, wherein the ratio ( $\phi$ /T) of average particle diameter of the wax ( $\phi$ ) to film thickness (T) is in the range of 0.5-5, and the content of the wax in the film is such that 2-20% in area of the surface of the coating film is occupied by the wax when the surface is observed under an electron microscope.

- 25. (New) The method as claimed in claim 24, wherein the ratio T/Ra is in the range of 0.2-4.0.
- 26. (New) The method as claimed in claim 23, wherein the organic resin coating film contains one of (a) at least one coupling agent in a total amount of 2-50 wt% and (b) at least one metal oxide selected from SiO<sub>2</sub>, Fe<sub>3</sub>O<sub>4</sub>, Fe<sub>2</sub>O<sub>3</sub>, Ni-O, Zr-O, Cr<sub>2</sub>O<sub>3</sub>, and Al<sub>2</sub>O<sub>3</sub> in a total amount of 2-80 wt%, or both (a) and (b).
- 27. (New) The method as claimed in claim 23, wherein the cold rolled steel strip or pickled hot rolled steel strip is subjected, prior to the formation of the organic resin coating film to pretreatment by applying one of (1) an acid selected from hydrochloric

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acid, sulfuric acid, nitric acid, and a mixture of these and (2) an acidic solution containing ions of at least one metal selected from Ni, Co, Fe, Zr, Sb, V, Mo, and W, or both (1) and (2).

- 28. (New) The method as claimed in claim 23, wherein the cold rolled steel strip or pickled hot rolled steel strip is subjected, prior to the formation of the organic resin coating film, to plating with a metal selected from Ni, Cr, and Fe or an alloy based on the metal to form a plated film with a coating weight of 0.1-20 g/m<sub>2</sub>.
- 29. (New) An inner magnetic shield manufactured from the inner magnetic shield material as claimed in claim 1 without blackening treatment.
- 30. (New) A color picture tube having an inner magnetic shield as claimed in claim 29.